

ABSTRACT OF THE DISCLOSURE

A light projector is provided which includes an elliptical reflector, a first spherical retro-reflector, the first retro-reflector having an first aperture formed therein, the first aperture having a first diameter and a first center-point, a second spherical retro-reflector located between the elliptical reflector and the first retro-reflector, the second retro-reflector having a second aperture formed therein, the second aperture having a second diameter and a second center-point, the second diameter smaller than the first diameter, the first and second center-points lying along a common axis, and a light source, the light source located at a foci of the elliptical reflector, the light source lying along the common axis, the elliptical reflector reflecting light emitted by the light source, the reflected light passing through the first and second apertures, the first and second retro-reflectors being positioned so as to reflect light emitted by the light source back towards the light source. Also provided is a light projector that includes a light source projecting a beam of light; and an optical element movable between a first position in which the beam of light does not impinge upon the optical element, a second position in which substantially all of the beam of light impinges upon the optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical element, wherein the optical element is comprised of a plurality of radially sectioned sub-elements.